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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/786,008

02/26/2004

Nobuyasu Kanekawa

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3549

24956

7590

03/10/2006

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.
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SUITE 370
ALEXANDRIA, VA 22314

EXAMINER

NGUYEN, VIET Q

ART UNIT

PAPER NUMBER

2827

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/786,008

Applicant(s)

KANEKAWA ET AL.

Examiner

Viet Q. Nguyen

Art Unit

2827

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Pre-Amendment filed on 10/11/2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-90 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-27, 49-90 is/are allowed.
- 6) ☒ Claim(s) 28, 34, 35 and 42 is/are rejected.
- 7) ☒ Claim(s) 29-33, 36-41 and 43-48 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/14/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims **7-48** & new claims **49-90** (submitted on **11/29/2005**) are now present for examination in view of petition request filed on **11/29/2005**. This action will replace the last office action mailed on **10/19/2005**, which was erroneous based on old claims.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims **28 & 34** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims **28 & 29**, **respectively**, of U.S. Patent No. **5,789,805 (Kanekawa et al, with same assignee/inventor)**. Although the conflicting claims are not identical, they are not patentably distinct from each other because both claims **28 & 34** of instant application essentially recite identical element and/or structure as earlier presented in claims **28 & 29** from the above-identified patent.

For example, claim **28** (from this application) only differs from claim **28** (from patent) on the recitations of "**a plurality of data lines**" as compared to "**data lines**" presented in patent. Similarly, claim **34** (from this application) only differs from claim **29** (from patent) on the wording of "**at least one of said chips**" as compared to "**said first and second groups of chips**" recited in patent. Thus, it would have been obvious to one skilled in this art that both of these sets of claims constitute toward the same set of functional elements as well as a same identical structure.

4. Claims **35** is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims **1, or 5, or 7** of U.S. Patent No. **6,223,273 (Kanekawa et al, with same assignee/inventor)**. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims **35** of instant application essentially recite identical element and/or structure as earlier presented in claims **1, 5, or 7** from the above identified patent.

For example, claim **35** (from this application) only differs from claims **1, 5, or 7** (from patent) on the recitations of "**a portion or another portion of a plurality of bits**" as compared to "**upper bits**", "**lower bits**", "**upper bytes**", or "**lower bytes**" recited in patent. Thus, it would have been obvious to one skilled in this art that both of these sets of claims constitute toward the same set of functional elements as well as a same identical structure.

Art Unit: 2827

5. Claim **42** is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims **1, 5, or 7** of U.S. Patent No. **6,223,273 (Kanekawa et al, with same assignee/inventor)**. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim **42** of instant application essentially recite identical element and/or structure as earlier presented in claims **1, 5, or 7** from the above identified patent.

For example, claim **42** (from this application) only differs from claim **1, 5, or 7** (from patent) on the recitations of "**a plurality of data lines**" as compared to "**data lines**" presented in patent. Thus, it would have been obvious to one skilled in this art that both of these sets of claims constitute toward the same set of functional elements as well as a same identical structure.

6. Other remaining claims contain allowable subject matter over the prior arts of record for the following stated reasons:

- Claims **7-27** recite a semiconductor multi-chip module that includes a plurality of first data lines used **exclusively** by first group of semiconductor chips formed on first side of substrate, and a plurality of second data lines used **exclusively** by second group of semiconductor chips formed on second side of substrate.
- Claims **29-33, 36-41, and 43-48** are objected as being dependent upon their respective rejected base claims, but recite the specific ceramic substrate material, wire bonding, and use of multilayer wirings substrate, which are also not seen or fairly suggested elsewhere in the arts.


Art Unit: 2827


- Newly proposed claims **49-90** per applicant's pre-amendment filed on 10/11/2005 are allowed as they recite specific data line connections exclusively for separate groups of chips lying on each side of the substrate.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Viet Q. Nguyen whose telephone number is (571) 272-1788. The examiner can normally be reached on 7am-6pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


V. Nguyen
10/14/2005


VIET Q. NGUYEN
PRIMARY EXAMINER